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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/733,401	12/08/2000	James Murray	003242.P014	1880

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EXAMINER

SCHNEIDER, JOSHUA D

ART UNIT PAPER NUMBER

2182

DATE MAILED: 12/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/733,401

Applicant(s)

MURRAY ET AL.

Examiner

Joshua D Schneider

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

RCE filed

- 1) ☒ Responsive to communication(s) filed on 17 September 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 6, 12-16 and 21-32 is/are pending in the application.
- 4a) Of the above claim(s) 23 and 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6, 12-16, 21, 22, 24-27 and 29-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/17/2004 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 12, and 15, have been considered but are moot in view of the new ground(s) of rejection. The Kamiya reference was used to teach the termination and re-execution of a DMA transfer. The applicant has amended so that the termination and re-execution of the transfer of Kamiya is not the same as that taught by the applicant. While the new method may be obvious, a new rejection is set forth to meet the limitations of the new claims.

3. Applicant's failure to respond to the restriction of claims 23 and 28 in the final action mailed of 11/03/2003 is an acquiescence of the position set forth by the examiner. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 6, 12-16, 21, 22, 24-27, and 29-32 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,947,366 to Johnson. With regards to claim 1, Johnson teaches a direct memory access (DMA) controller (column 2, lines 7-8), I/O devices coupled to the DMA controller (Fig. 1, element 120, and column 3, lines 4-12), and the termination of a DMA transfer before a terminal count is reached (column 29, lines 1-65).

6. With regards to claim 2, Johnson teaches the re-execution of a DMA transfer (column 29, lines 32-42) with an I/O device.

7. With regards to claim 6, Johnson teaches a system interconnect (Fig. 1, elements 105 and 112), coupled to the I/O device (Fig. 1, element 120, and column 3, lines 4-12) and a DMA controller (column 29, lines 1-65), a CPU coupled to the system interconnect (Fig. 1 elements 101), and a memory coupled to the system interconnect (Fig. 1, element 103, and column 3, lines 4-12).

8. With regards to claim 12, Johnson teaches a direct memory access (DMA) controller (Fig. 1, element 120, and column 3, lines 4-12), I/O devices coupled to the DMA controller (Fig. 1, element 120, and column 3, lines 4-12), and the re-executing of a DMA transfer from the beginning upon the receiving of a request signal (column 29, lines 32-42). It is inherent that the signals required to restart the access and subsequent transfer are used with this system in order to execute the transfer.

9. With regards to claims 13 and 15, Johnson teaches a direct memory access (DMA) controller to transfer data between and first and second device (column 2, lines 7-8), I/O devices coupled to the DMA controller (Fig. 1, element 120, and column 3, lines 4-12), and the re-

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executing of a DMA transfer from the beginning upon the receiving of a request signal (column 29, lines 32-42). Johnson teaches the termination of a DMA transfer (column 29, lines 1-65) with an I/O device. Johnson teaches the re-execution of a DMA transfer (column 29, lines 32-42) with an I/O device. Johnson teaches the use of acknowledge signals in DMA transfers (column 9, lines 37-50, and column 10, lines 12-17). Johnson teaches the erasing by reloading the configuration registers with control information (column 29, lines 32-42).

10. With regards to claim 14, Johnson teaches the erasing by reloading the configuration registers with control information (column 29, lines 32-42).

11. With regards to claim 16, Johnson teaches the reloading the configuration registers with control information (column 29, lines 32-42).

12. With regards to claim 21, Johnson teaches the re-execution of a DMA transfer (column 29, lines 32-42) with an I/O device. The associated requests for the restarting of these transfers are inherent. After an error, the use of acknowledge signals will again be needed, as they are part of the basic transfer signaling used in all of the DMA accesses (column 9, lines 37-50, and column 10, lines 12-17).

13. With regards to claim 22, Johnson teaches the re-execution of a DMA transfer with an I/O device after termination of the transfer due to transfer errors (column 29, lines 1-65). The associated requests for the termination and restarts of these transfers are inherent. After an error, the use of acknowledge signals will again be needed, as they are part of the basic transfer signaling used in all of the DMA accesses (column 9, lines 37-50, and column 10, lines 12-17).

14. With regards to claims 24 and 29, Johnson teaches a first channel coupled to the I/O device to facilitate the transfer of data (column 29, lines 32-42).

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15. With regards to claims 25 and 30, Johnson teaches memory means to store configuration data (column 29, lines 32-42).

16. With regards to claims 26 and 31, Johnson teaches error-checking logic for checking data transfers for errors (column 29, lines 1-65).

17. With regards to claims 27 and 32, Johnson teaches control logic to control the transfer of the data (column 29, lines 32-42)

Conclusion

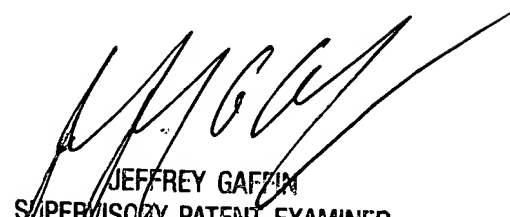
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua D Schneider whose telephone number is (571) 272-4158.

The examiner can normally be reached on M-F, 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A Gaffin can be reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JDS


JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
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